

Amendment to the Claims:

Please add new claim 38 as set forth below. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Canceled)
2. (Previously Presented) The method of claim 17, wherein the scheduled duration is an integer multiple of a minimum scheduled duration.
3. (Previously Presented) The method of claim 17, wherein the scheduled duration is less than or equal to a scheduling period, the scheduling period is an interval of time after a scheduler makes a scheduling decision.
4. (Original) The method of claim 3, wherein the scheduling period is variable.
5. (Original) The method of claim 3, wherein the scheduled duration is variable.
6. (Previously Presented) The method of claim 4, wherein the scheduled rate is variable.
7. (Original) The method of claim 5, wherein the scheduled duration is based on priority of a station.
8. (Original) The method of claim 5, wherein the scheduled duration is based on a maximum supportable rate.
9. (Original) The method of claim 8, wherein the scheduled duration is the longest possible duration for the maximum supportable rate.
10. (Original) The method of claim 5, wherein the scheduled duration is based on an estimate of amount of data in the buffer.
11. (Original) The method of claim 7, wherein the priority of the station is based on channel conditions.
12. (Original) The method of claim 7, wherein the priority of the station is based on an estimate of the amount of data in the buffer.
13. (Original) The method of claim 7, wherein the priority of the station is based on the rate requested.
14. (Previously Presented) The method of claim 7, wherein the priority of the station is based on an allocated throughput.

15. (Original) The method of claim 7, wherein the station is a mobile station.

16. (Previously Presented) A method of scheduling, comprising:

receiving, by an apparatus, a rate request during a scheduling period;

transmitting, by the apparatus, a rate assignment responsive to the rate request, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration, wherein the scheduled rate determines how many minimum scheduled durations are in the scheduling duration; and

receiving data during a minimum scheduled duration at the scheduled rate,

wherein each minimum scheduled duration is less than or equal to the scheduling period, the scheduling period being an interval of time after transmission of the rate assignment and before the transmission of the next rate assignment.

17. (Previously Presented) A method of transmitting data, comprising:

transmitting, by an apparatus, a request for a rate if data arrives in a buffer, data in the buffer exceeds a buffer depth, and sufficient power exists to transmit at the rate requested;

receiving, by the apparatus, a rate assignment responsive to the request for the rate, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration; and

transmitting data, the transmitting responsive to the rate assignment, wherein the data is transmitted for the scheduled duration at the scheduled rate.

18. (Previously Presented) An apparatus for scheduling data transmissions, comprising:

means for receiving a rate request during a scheduling period;

means for transmitting a rate assignment responsive to the rate request, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration, wherein the scheduled rate determines how many minimum scheduled durations are in the scheduling duration; and

means for receiving data during a minimum scheduled duration at the scheduled rate,

wherein each minimum scheduled duration is less than or equal to the scheduling period, the scheduling period being an interval of time after transmission of the rate assignment and before the transmission of the next rate assignment.

19. (Previously Presented) An apparatus for transmitting data, comprising:

means for transmitting a request for a rate if data arrives in a buffer, data in the buffer exceeds a buffer depth, and sufficient power exists to transmit at the rate requested;

means for receiving a rate assignment responsive to the request for the rate, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration; and

means for transmitting data, the transmitting responsive to the rate assignment, wherein the data is transmitted for the scheduled duration at the scheduled rate.

20. (Canceled)

21. (Previously Presented) A computer-readable medium embodying a program of instructions executable by a processor to perform a method of transmitting data, comprising:

transmitting a request for a rate if data arrives in a buffer, data in the buffer exceeds a buffer depth, and sufficient power exists to transmit at the rate requested;

receiving a rate assignment responsive to the request for the rate, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration; and

transmitting data, the transmitting responsive to the rate assignment, wherein the data is transmitted for the scheduled duration at the scheduled rate.

22. (Previously Presented) A computer-readable medium embodying a program of instructions executable by a processor to perform a method of scheduling data transmissions, comprising:

receiving a rate request during a scheduling period;

transmitting a rate assignment responsive to the rate request, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration, wherein the scheduled rate determines how many minimum scheduled durations are in the scheduling duration; and

receiving data during a minimum scheduled duration at the scheduled rate,

wherein each minimum scheduled duration is less than or equal to the scheduling period, the scheduling period being an interval of time after transmission of the rate assignment and before the transmission of the next rate assignment.

23. (Previously Presented) The method of claim 16, wherein the scheduled duration is an integer multiple of a minimum scheduled duration.

24. (Canceled)

25. (Previously Presented) The method of claim 16, wherein the scheduling period is variable.

26. (Previously Presented) The method of claim 16, wherein the scheduled duration is variable.

27. (Previously Presented) The method of claim 25, wherein the scheduled rate is variable.

28. (Previously Presented) The method of claim 26, wherein the scheduled duration is based on priority of a station.

29. (Previously Presented) The method of claim 26, wherein the scheduled duration is based on a maximum supportable rate.

30. (Previously Presented) The method of claim 29, wherein the scheduled duration is the longest possible duration for the maximum supportable rate.

31. (Previously Presented) The method of claim 28, wherein the priority of the station is based on channel conditions.

32. (Previously Presented) The method of claim 28, wherein the priority of the station is based on the rate requested.

33. (Previously Presented) The method of claim 28, wherein the priority of the station is based on an allocated throughput.

34. (Previously Presented) A base station for scheduling data transmissions, comprising:

an antenna;

a receiver configured to receive a rate request during a scheduling period via the antenna;

a controller configured to determine a rate assignment responsive to the rate request, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration, wherein the scheduled rate determines how many minimum scheduled durations are in the scheduling durations; and

a transmitter configured to transmit the rate assignment,

wherein the receiver is further configured to receive data during a minimum scheduled duration at the scheduled rate,

wherein each minimum scheduled duration is less than or equal to the scheduling period, the scheduling period being an interval of time after transmission of the rate assignment and before the transmission of the next rate assignment.

35. (Previously Presented) A mobile station for transmitting data, comprising:
a controller configured to generate a request for a rate if data arrives in a buffer, data in the buffer exceeds a buffer depth, and sufficient power exists to transmit at the rate requested;
an antenna;
a transmitter configured to transmit the request for the rate via the antenna; and
a receiver configured to receive a rate assignment responsive to the rate request, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration,

wherein the transmitter is further configured to transmit data, the transmitted data responsive to the rate assignment, wherein the data is transmitted for the scheduled duration at the scheduled rate.

36. (Previously Presented) An apparatus for scheduling data transmissions, comprising:

a receiver configured to receive a rate request during a scheduling period;
a controller configured to determine a rate assignment responsive to the rate request, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration, wherein the scheduled rate determines how many minimum scheduled durations are in the scheduling duration; and

transmitter configured to transmit the rate assignment,

wherein the receiver is further configured to receive data during a minimum scheduled duration at the scheduled rate,

wherein each minimum scheduled duration is less than or equal to the scheduling period, the scheduling period being an interval of time after transmission of the rate assignment and before the transmission of the next rate assignment.

37. (Previously Presented) An apparatus for transmitting data, comprising:
a controller configured to generate a request for a rate if data arrives in a buffer, data in the buffer exceeds a buffer depth, and sufficient power exists to transmit at the rate requested;
a transmitter configured to transmit the request for the rate; and

a receiver configured to receive a rate assignment responsive to the rate request, the rate assignment indicating a scheduled duration and a scheduled rate applicable for the scheduled duration,

wherein the transmitter is further configured to transmit data, the transmitted data responsive to the rate assignment, wherein the data is transmitted for the scheduled duration at the scheduled rate.

38. (New) The method of claim 17, wherein the request for the rate includes an estimate of an amount of data in the buffer, and the scheduled duration in the rate assignment is based on the estimate of the amount of data in the buffer.